

IN THE CLAIMS

1-20. (Cancelled)

21. (Currently amended) An ammonia synthesis catalyst, consisting of iron oxides and promoters, wherein the promoters comprise both a cobalt metal oxide and a titanium metal oxide, in addition to an aluminum metal oxide, a potassium metal oxide, a calcium metal oxide and a magnesium metal oxide, wherein cobalt metal is present at a concentration of from 0.1 to 3.0 wt%, and titanium metal is present at a concentration of from 0.1 to 1.0 wt%, aluminum metal is present at a concentration of from 1.5 to 1.8 wt%; potassium metal is present at a concentration of from 0.4 to 0.5 wt%; calcium metal is present at a concentration of from 1.6 to 1.8 wt%; magnesium metal is present at a concentration of from 0.3 to 0.5 wt%, and the balance is iron oxides with natural impurities.

22. (Cancelled)

23. (Previously presented) The ammonia synthesis catalyst according to claim 21, wherein the iron oxides have an atomic ratio of $\text{Fe}^{2+}/\text{Fe}^{3+}$ of between 0.5 to 0.65.

24. (Currently amended) The ammonia synthesis catalyst of claim 21, wherein cobalt metal is present at a concentration of from 0.35 to 3.0 wt%; titanium metal is present at a concentration of from 0.38 to 0.95 wt%; aluminum metal is present at a concentration of from 1.5 to 1.8 wt%; potassium metal is present at a concentration of from 0.4 to 0.5 wt%; calcium metal is present at a concentration of from 1.6 to 1.8 wt%; magnesium metal is present at a concentration of from 0.3 to 0.5 wt%, and the balance ~~being~~ is iron oxides with natural impurities.

25. (Currently amended) An ammonia synthesis catalyst, ~~comprising~~ comprising iron oxides and promoters, wherein the promoters comprise both a cobalt metal oxide and a titanium metal oxide, in addition to an aluminum metal oxide, a potassium metal oxide, a calcium

metal oxide and a magnesium metal oxide, wherein cobalt metal is present at a concentration of from 0.1 to 3.0 wt%, ~~and~~ titanium metal is present at a concentration of from 0.1 to 1.0 wt%, aluminum metal is present at a concentration of from 1.5 to 1.8 wt%; potassium metal is present at a concentration of from 0.4 to 0.5 wt%; calcium metal is present at a concentration of from 1.6 to 1.8 wt%; and magnesium metal is present at a concentration of from 0.3 to 0.5 wt%.

26. (Cancelled)

27. (Currently amended) The ammonia synthesis catalyst of claim 25, wherein cobalt metal is present at a concentration of from 0.35 to 3.0 wt%; titanium metal is present at a concentration of from 0.38 to 0.95 wt%; aluminum metal is present at a concentration of from 1.5 to 1.8 wt%; potassium metal is present at a concentration of from 0.4 to 0.5 wt%; calcium metal is present at a concentration of from 1.6 to 1.8 wt%; magnesium metal is present at a concentration of from 0.3 to 0.5 wt%, and the balance ~~being~~ is iron oxides with natural impurities.

28. (Currently amended) The ammonia synthesis catalyst according to claim 25, ~~which consists~~ consisting essentially of iron oxides, cobalt metal oxide, titanium metal oxide, aluminum metal oxide, potassium metal oxide, calcium metal oxide and magnesium metal oxide.

29. (Previously presented) The ammonia synthesis catalyst according to claim 25, wherein the iron oxides have an atomic ratio of $\text{Fe}^{2+}/\text{Fe}^{3+}$ of between 0.5 to 0.65.

30-40. (Cancelled)